

# United States Patent and Trademark Office

PAPER

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

06/01/2007

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,010	02/24/2005	Orlando Starke	04306/0202159-US0	7222
7278 DARBY & DA	7590 06/01/2007 ARRY P.C	EXAMINER		
P.O. BOX 770			CAZAN, LIVIUS RADU	
Church Street Station New York, NY 10008-0770			ART UNIT	PAPER NUMBER
			3729	
			MAIL DATE	DELIVERY MODE

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/519,010	STARKE ET AL.				
Office Action Summary	Examiner	Art Unit				
	Livius R. Cazan	3729				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet w	vith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D.  Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUN 36(a). In no event, however, may a will apply and will expire SIX (6) MO 1, cause the application to become A	ICATION. I reply be timely filed INTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 24 F	ebruary 2005	•				
	action is non-final.	·				
<i>'</i> —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E						
Disposition of Claims						
4)⊠ Claim(s) 1-14 is/are pending in the application						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-14</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
9) The specification is objected to by the Examine	er	•				
•		⊠ objected to by the Examiner.				
10)⊠ The drawing(s) filed on <u>21 December 2004</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correc						
11) The oath or declaration is objected to by the Ex		•				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C.	§ 119(a)-(d) or (f).				
a)⊠ All b)⊡ Some * c)⊡ None of:						
<ol> <li>Certified copies of the priority document</li> </ol>	_ , , , ,					
	2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the prior application from the International Burea	•	n received in this National Stage				
* See the attached detailed Office action for a list		ot received.				
Goo the altaeries settines of the action for a lieu	or the common copies we					
		•				
Attachment(s)						
1) Notice of References Cited (PTO-892)		Summary (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date  Notice of Informal Patent Application						
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 12/21/2004.	6) Other: _					
S. Patent and Trademark Office						

iT

Art Unit: 3729

#### **DETAILED ACTION**

# **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered. See page 1, Ins. 31 and 32.

### **Drawings**

3. The drawings are objected to because it is believed "13" in Fig. 2 should read -12--. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Objections

4. Claims 1-10, 12, and 13 are objected to because of the following informalities: in claim 1, In. 25, "he" should read --the--. Appropriate correction is required.

# Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Lee (US6077054 to Lee et al.).

Lee discloses two lamination portions (120a, 120b, Fig. 4) as claimed, at least one of said lamination portions having at least part of an internal axial extension and one end radial extension, as claimed. See Figs. 3 and 4

# Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 3729

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 9. Claims 1-4, 6, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US6077054 to Lee et al.) in view of Lilie (WO01/73923 to Lilie et al.).

Regarding claims 1, 6, and 9, Lee discloses steps a, e, and f of claim 1, as well as the subject matter of claims 6 and 9. See Fig. 4, wherein tubular coil 110 is enclosed within the two halves (annular assemblies) of the stator core. See col. 3, Ins. 50-67 and col. 4, Ins. 22-34. See 120a and 120b in Fig. 4.

Lee does not disclose steps b-d of claim 1.

Lilie discloses forming an annular stator for a compressor by providing a rectilinear alignment of each of a plurality of lamination portions laterally mutually seated, with their respective radially internal axial edges defining a flat surface (see Figs. 2 and 4-7). The laminations are connected together to allow only a limited relative

Art Unit: 3729

angular displacement, and the stack is deformed to form an annular shape (annular assembly), as claimed. See Fig. 3 and steps a-c on page 3, Ins. 11-23.

At the time the invention was made, it would have been obvious to combine the teachings of Lee and Lilie to form a stator core comprising two halves, each half being formed from a rectilinear stack of laminations which is thereafter deformed into an annular shape. One of ordinary skill in the art would have been motivated to do so in order to reduce the number of steps required to form the two halves of the stator (see page 8, Ins. 8-15 for a list of advantages), while at the same time maintaining the advantage of employing two halves, mainly easy assembly of the coil within the core.

Regarding claim 2, see Fig. 3 of Lee, particularly near numeral 120. The joint between the two halves can be easily seen, and it is clear that the halves (annular assemblies) are affixed to each other in seating regions (flat surfaces of the two cores are in contact at the joint) with mutual fitting.

Regarding claims 3, 4, and 10, Lee in view of Lilie as applied to claim 1 disclose substantially the same invention as the Applicant, except for affixing the two halves of the stator core using an adhesive and allowing the adhesive to cure under tension.

It is common knowledge to use adhesives to join two parts and to maintain the parts to be joined under tension while the adhesive sets.

Therefore, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to join the two halves by means of an adhesive as claimed, in order to simply and inexpensively form the completed stator. Other means of joining could include using bolts or welding. Likewise, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize an adhesive to affix the tubular coil to the two halves (annular assemblies), in order to ensure the coil does not move within the stator core.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee and Lilie in view of Laskaris (US5318412 to Laskaris et al.).

Lee and Lilie together disclose the same invention as the Applicant except for the seating region of the laminations of one of the halves being a recess, the laminations of the other half having a complementary projection to be fitted in the recess.

Laskaris discloses this limitation. See Fig. 2, especially the joint between portions 12a and 12b. Half 12a contains a projection which fits into a complementary recess of half 12b.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the two core halves of Lee and Lilie with such seating regions, in order to form keying features which ensure the two halves are properly aligned and connected.

11. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee and Lilie in view of Anderson (US3043994 to Anderson et al.).

Lee and Lilie together disclose the same invention as the Applicant except for providing the coil with an insulating cover which is injected about the coil.

Anderson teaches it it is known to do this (see figures; see col. 1, Ins. 10-27.

Art Unit: 3729

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to form such an insulating cover over the coil of Lee and Lilie, in view of the teachings of Anderson. One of ordinary skill in the art would have been motivated to do so in order to protect the coil from damage.

12. Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Anderson.

Regarding claim 12, the claim is a product-by-process claim. The patentability of a product does not depend on its method of production. In re Thorpe, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985) (citing In re Pilkington, 411 F.2d 1345, 1348, 162 USPQ 145, 147 (CCPA 1969)). If a product in a product-by-process claim is the same as or obvious from a product in the prior art, the claim is unpatentable even though the prior product is made by a different process. Id. citing *In re Marosi*, 710 F.2d 799, 803, 218 USPQ 289, 292-93 (Fed. Cir. 1983); *Johnson & Johnson v. W.L. Gore*, 436 F. Supp. 704, 726, 195 USPQ 487, 506 (D. Del. 1977); see also *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974).

Regarding claims 12 and 14, Lee discloses two halves of a stator core, each half having an annular shape and comprising a plurality of laminations, a coil being held between the two halves of the core. The laminations have at least part of an internal extension, as claimed, and at least one end radial extension, as claimed. See Figs. 3 and 4.

However, Lee does not disclose a coil which has an insulating cover.

Anderson discloses this limitation, as previously discusses.

Art Unit: 3729

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Lee, in view of the teachings of Anderson, by providing such a cover for the coil, in order to protect the coil from damage.

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Laskaris.

The claim is a product-by-process claim. The patentability of a product does not depend on its method of production. In re Thorpe, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985) (citing In re Pilkington, 411 F.2d 1345, 1348, 162 USPQ 145, 147 (CCPA 1969)). If a product in a product-by-process claim is the same as or obvious from a product in the prior art, the claim is unpatentable even though the prior product is made by a different process. Id. citing *In re Marosi*, 710 F.2d 799, 803, 218 USPQ 289, 292-93 (Fed. Cir. 1983); *Johnson & Johnson v. W.L. Gore*, 436 F. Supp. 704, 726, 195 USPQ 487, 506 (D. Del. 1977); see also *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974).

Lee discloses the same invention as the Applicant, as claimed, and as previously discussed, except for one of the core halves having a projection which is complementary to a recess in the other half (annular assembly) of the core.

As previously discussed, Laskaris discloses this limitation.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was mad e to provide the two halves with such features, in order to form keying features which ensure the two halves are properly aligned and connected.

Page 9

Application/Control Number: 10/519,010

Art Unit: 3729

#### Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US6506032, JP10322945.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Livius R. Cazan whose telephone number is (571) 272-8032. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571)272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LRC/ 5/25/2007

PETER VO SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3700